A timestamping proof standard

OpenTimestamps aims to be a standard format for blockchain timestamping.

Stamp & Verify

Use the in-browser stamper and verifier

How it works

Details on OpenTimestamps

Members

Companies using OpenTimestamps

Code repositories

OpenTimestamps repositories

Mailing lists

OpenTimestamps announcements

Stamp & Verify

Birth + Amended Certificate of Dorothy Jean Dandridge -- Clearer Copy .jpg.ots 422 B

Stamped SHA256 hash: 7f75d13e694bb94545b4d1970fca4c62946f3f2a68d4ec392e259f9964a6b144

Birth + Amended Certificate of Dorothy Jean Dandridge -- Clearer Copy .jpg 1.6 MB

SHA256: 7f75d13e694bb94545b4d1970fca4c62946f3f2a68d4ec392e259f9964a6b144

WARNING!

The Bitcoin transaction is unconfirmed. The attestation is still pending. Once the transaction confirms, this file will be updated.

Timestamp of 7f75d13e694b

Document digest (sha256):

7f75d13e694bb94545b4d1970fca4c62946f3f2a68d4ec392e259f9964a6b144

Bitcoin Attestation
Unknown Attestation
Pending/Other Attestation
Comments
Fork
append(fdc3b4...)

7f75d13e694bb94545b4d1970fca4c62946f3f2a68d4ec392e259f9964a6b144fdc3b45bd152109ceb93cbce542bf047

sha256()

cdeb488819a74cc96a96de8a5e0e89e947f029b6e681b4067c8156d71c9e4918

Fork

Fork in 3 paths

append(4c3b14...)

1

cdeb488819a74cc96a96de8a5e0e89e947f029b6e681b4067c8156d71c9e49184c3b14ba956b234dd59199e5ccc53a85
sha256()

1

d0e7fad89075e97879ae418ecb705ea24592c1d1bec135f300b8d3402f813654

prepend(830cd1...)

1

830cd1dcec65bdb25c3024c9547156e103932fda27daa24b5dc288faebf5639fd0e7fad89075e97879ae418ecb705ea24592c1d1bec135f300b8d3402f813654

sha256()

1

72745f094adf5f8797f5e3bc26090e36b91f0ac39341b1d089c56e037d2f1028

prepend(643062...)

1

643062c272745f094adf5f8797f5e3bc26090e36b91f0ac39341b1d089c56e037d2f1028

append(0a8f8c...)

1

643062c272745f094adf5f8797f5e3bc26090e36b91f0ac39341b1d089c56e037d2f10280a8f8c88d18e36c6

Pending Attestation
Pending attestation: server https://alice.btc.calendar.opentimestamps.org
append(939c1d...)

2

cdeb488819a74cc96a96de8a5e0e89e947f029b6e681b4067c8156d71c9e4918939c1d3690c9c3b9fd1ea3b43ddb4d78

sha256()

2

d62b161cadb73c0896f3b54819707f514770f5dd69992b8fbbc06d0ae484b28b

prepend(643062...)

2

643062c3d62b161cadb73c0896f3b54819707f514770f5dd69992b8fbbc06d0ae484b28b

append(5e2a04...)

2

643062c3d62b161cadb73c0896f3b54819707f514770f5dd69992b8fbbc06d0ae484b28b5e2a045be5dac128

Pending Attestation
Pending attestation: server https://bob.btc.calendar.opentimestamps.org
append(06f780...)

3

cdeb488819a74cc96a96de8a5e0e89e947f029b6e681b4067c8156d71c9e491806f7809fd4a8dc99bae1d324f6261dbf

sha256()

3

952dd3398569be69e2d54baa4902ef953b5275a825ac7e5b867a5756e8f5650f

prepend(d344b4...)

3

d344b474bb187254eeb432260d684fafb42dd9f69bd81b61eb361e2992c6f69f952dd3398569be69e2d54baa4902ef953b5275a825ac7e5b867a5756e8f5650f

sha256()

3

982a3321d3e25e4ecb670cead54e03d22bfd5cc48e3596517ede9a2198ee93a4

prepend(643062...)

3

643062c2982a3321d3e25e4ecb670cead54e03d22bfd5cc48e3596517ede9a2198ee93a4

append(8507cb...)

3

643062c2982a3321d3e25e4ecb670cead54e03d22bfd5cc48e3596517ede9a2198ee93a48507cb43fc5cbc25

Pending Attestation
Pending attestation: server https://finney.calendar.eternitywall.com

How it Works

A timestamp proves that some data existed prior to some point in time. OpenTimestamps defines a set of operations for creating provable timestamps and later independently verifying them. At the time of writing timestamping on the Bitcoin blockchain is supported, the format is flexible enough to support a variety of methods. More.

Anyone could realize a timestamp with the permissionless blockchain by paying the transaction fees, for your convenience we offer calendar servers that perform this operation for you. These servers are **free to use** and they don't require any registration or api key.

Python

Javascript

Java

```
$ pip3 install opentimestamps-client
$ ots stamp my-file
```

More

```
$ npm install -g javascript-opentimestamps
$ ots-cli.js stamp my-file
```

More

```
$ git clone https://github.com/opentimestamps/java-opentimestamps
$ cd java-opentimestamps
$ mvn install
$ java -jar target/OtsCli.jar stamp my-file
```

More

Calendars

The following are the, **free to use**, default calendars used by OpenTimestamps. They rely on donations to reduce maintainers efforts, they accept bitcoin and some accept lightning network payments. Check the calendars uptime.

Alice

Bob

Finney

Catallaxy

Members

Eternity wall

Stampery

Block Notary

Verisart

Signatura

OSDSP

catallaxy

Bylls

XcooBee

CondominioAdvisor

Cerved

TramitApp

Ayi & asociados

Tutelio

Id shooter

Creativity Safe

Jenia Software

Certifirm

DGI

Intesi Group

Trusty

Stampiz

Fakeproof

Certika

Knowmad Institut

Savis Digital

Add your company here

Repositories

Client

Client tool to perform stamping of files through a calendar server and to verify OpenTimestamps proof

opentimestamps-client

Server

Calendar Server receiving timestamp request from clients
opentimestamps-server

Python

Common library

python-opentimestamps

Javascript

Common library & Client tool

javascript-opentimestamps

Java

Common library & Client tool

java-opentimestamps

Rust

Rust library

rust-opentimestamps
@opentimestamps